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(54) **Method and apparatus for adaptive power management in a modem**

(57) A data traffic predictor for a modem, and a method for power management in a modem, are described. The data traffic predictor includes a data traffic monitor, a periodicity detector and a power mode controller. The data traffic monitor monitors incoming data to the modem. If the periodicity detector determines if the data is substantially periodic, which indicates that the data traffic is isochronous, the power mode control-

ler changes the modem power mode to quiescent power mode operating at a minimum data rate to permit the isochronous data traffic to be carried. The apparatus and method of the present invention permit low level control of a modem's power mode, and permit the use of a quiescent power mode running at a reduced data rate, without sacrificing quick recovery time to a full on power mode when required.

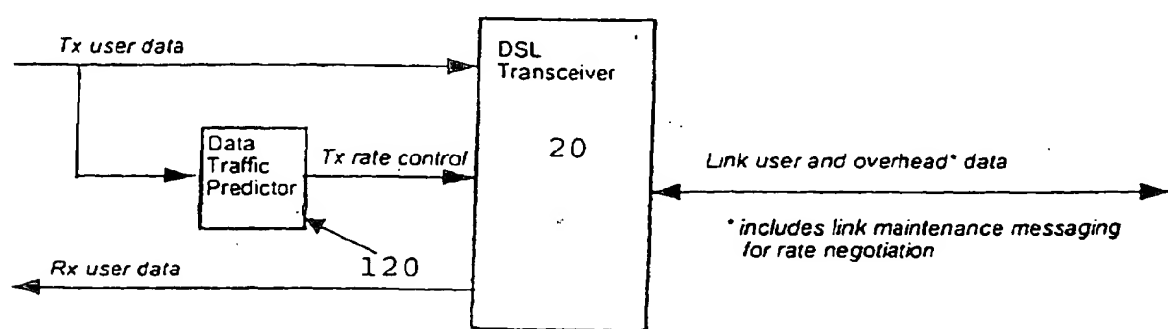


Fig. 3



European Patent  
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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 31 1340

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 742 514 A (BONOLA THOMAS JOSEPH) 21 April 1998 (1998-04-21) * abstract *	1,9,15	H04M11/06 H04L12/10
A	* column 2, line 56 - column 3, line 28 *	2-8, 10-14, 16-20	
Y	--- US 5 022 071 A (MOZER FORREST S ET AL) 4 June 1991 (1991-06-04) * column 1, line 11-21 * * column 2, line 50 - column 4, line 36; claim 1 *	1-20	
Y	--- US 5 987 338 A (GIBBONS DAVID ET AL) 16 November 1999 (1999-11-16) * abstract * * column 2, line 53 - line 67 * * column 6, line 22 - line 43 *	1-20	
A	--- US 4 701 946 A (METZ JOSEPH S ET AL) 20 October 1987 (1987-10-20) * abstract * * column 9, line 1 - column 12, line 10 * -----	1-20	<div>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</div> <div>H04M H04L G06F</div>
The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>10 March 2003</b>	Examiner <b>Radoglou, A</b>
<div>CATEGORY OF CITED DOCUMENTS</div> <div> X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document  T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document </div>			

EPO FORM 1503 03 82 (P04031)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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